

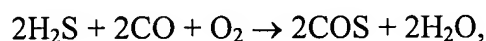
AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A COS treatment apparatus for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, which comprises:

a first reactor into which the gasified gas is to be introduced, ~~the gas having~~ the first reactor being configured to increase an initial concentration of COS in the gas and decrease concentrations of H₂S, CO and O₂ in the gas at a gas temperature of at least 300°C; and

a second reactor located at a downstream side of a gasified gas flow with respect to the first reactor, the second reactor being configured to decrease the increased concentration of COS in the gas passed through the first reactor to a concentration lower than the initial concentration of COS in the gas,

wherein the first reactor comprises an O₂ removal catalyst for accelerating the following reaction:

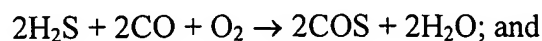


the O₂ removal catalyst consisting of TiO₂ and Cr₂O₃ or consisting of TiO₂ and NiO, and wherein the second reactor comprises a COS conversion catalyst.

2-3. (Cancelled)

4. (Original) The COS treatment apparatus according to claim 1, wherein said O₂ removal catalyst is located in a higher-temperature region with respect to said COS conversion catalyst.

5. (Currently Amended) A COS treatment method for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, the method comprising:
increasing an initial concentration of COS in the gas and decreasing concentrations of H₂S, CO and O₂ in the gas ~~removing O₂ from the gas~~ by using an O₂ removal catalyst consisting of TiO₂ and Cr₂O₃ or consisting of TiO₂ and NiO at a gas temperature of at least 300°C to accelerate the following reaction:



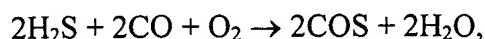
after the removing of O₂ from the gas increasing of the initial concentration of COS in the gas and the decreasing of the concentrations of H₂S, CO and O₂ in the gas, decreasing the increased concentration of COS in the gas to a concentration lower than the initial concentration of COS in the gas by converting COS contained in the gas to H₂S by using a COS conversion catalyst.

6-7. (Cancelled)

8. (Currently Amended) The COS treatment method according to claim 5, wherein said removing O₂ from the gas increasing of the initial concentration of COS in the gas and decreasing of the concentrations of H₂S, CO and O₂ in the gas is performed at a higher temperature with respect to said ~~converting COS to H₂S~~ decreasing of the increased concentration of COS in the gas.

9. (Currently Amended) A COS treatment apparatus for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, comprising:

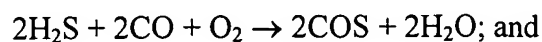
a reactor into which the gasified gas is to be introduced, the reactor being configured to convert COS to H₂S in the presence of O₂, the reactor comprising a TiO₂ catalyst carrying Cr₂O₃ and BaO, wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is an O₂ removal catalyst for accelerating the following reaction:



and wherein the TiO₂ catalyst carrying Cr₂O₃ and BaO is a COS conversion catalyst.

10. (Currently Amended) A COS treatment method for a gasified gas containing COS, H₂S, H₂O, O₂, and CO, the method comprising:

removing O₂ from the gas by using a TiO₂ catalyst carrying Cr₂O₃ and BaO to accelerate the following reaction:



simultaneously converting COS to H₂S by using the TiO₂ catalyst carrying Cr₂O₃ and BaO.